## **WHAT IS CLAIMED IS:**

- A method of gathering statistical information comprising:

   calculating a holding time for a single call; and
   calculating a holding time of a soft added call.
- 2. The method of claim 1, wherein the single call relates to a call of a mobile terminal with respect to one base station.
- 3. The method of claim 1, wherein the soft added call relates to a call of a mobile terminal with respect to more than one base station.
- 4. The method of claim 1, further comprising determining a holding time based on the calculated holding time of the single call and the calculated holding time of the soft added call.
- 5. The method of claim 4, wherein calculating the holding time of the single call comprises counting a period when an originated/terminated call is set up.
- 6. The method of claim 5, wherein calculating the holding time comprises counting the holding time from a point of time when a channel resource is occupied due to a call origination/termination to a base station to a point of time when the channel resource is withdrawn.

- 7. The method of claim 5, wherein calculating the holding time comprises counting the holding time from a point of time when a channel resource is occupied due to receipt of a call origination/termination request message to a point of time when a soft add notification message is received from another base station after call setup in response to the call origination/termination request, and counting the holding time from a point of time when the soft drop notification message is received from the another base station to a point of time when the channel resource is withdrawn due to completion of the soft added call.
- 8. The method of claim 1, wherein calculating the holding time of the soft added call includes calculating a handoff holding time by counting a period when soft added calls are set up.
- 9. The method of claim 8, wherein calculating the handoff holding time comprises counting the handoff holding time from a point of time when a source base station receives a soft add notification message from another base station to a point of time when the channel resource is withdrawn.
- 10. The method of claim 8, wherein calculating the handoff holding time comprises counting the handoff holding time from a point of time when the channel resource is occupied due to a target base station's receipt of a handoff request from a mobile

terminal to a point of time when the target base station receives a soft drop notification message from another base station.

- 11. The method of claim 8, wherein calculating the handoff holding time comprises counting the handoff holding time from a point of time when the channel resource is occupied due to a neighboring base station's receipt of a handoff request from a mobile terminal to a point of time when the neighboring base station transmits a soft drop notification message and the channel resource is withdrawn.
- 12. A method of gathering statistical information regarding a mobile communication system, comprising:

calculating a holding time by counting a period of an originated/terminated call; and

calculating a handoff holding time by counting a period when soft added calls are set up due to a handoff.

13. The method of claim 12, wherein calculating the holding time comprises:

setting up a single call by a source base station's detecting the originated/terminated call and allotting a channel resource; and

starting a first holding timer.

- 14. The method of claim 13, wherein when the source base station receives a soft added notification message from another base station, calculating the holding time further comprises calculating a first holding time based on said first holding timer.
- 15. The method of claim 14, wherein when a new single call for a target base station is set up and the other base stations are dropped, calculating the holding time further comprises starting a second holding timer.
- 16. The method of claim 15, wherein when the single call for the target base station is completed, calculating the holding time further comprises withdrawing the channel resource and calculating a second holding time by stopping said second holding timer.
- 17. The method of claim 12, wherein calculating the handoff holding time comprises:

setting up a soft added call by a target base station's detecting a handoff request from a mobile terminal, transmitting a soft add notification message, allotting a channel resource, and beginning a first handoff holding timer.

18. The method of claim 17, wherein when a source base station receives the soft add notification message from another base station, calculating the handoff holding time further comprises beginning a second handoff holding timer.

- 19. The method of claim 18, wherein when a soft added call for the source base station is completed, calculating the handoff holding time further comprises transmitting a soft drop notification message, withdrawing the channel resource and calculating a first handoff holding time by stopping said first handoff holding timer.
- 20. The method of claim 19, wherein when the target base station receives the soft drop notification message from another base station, calculating the handoff holding time further comprises calculating a second handoff holding time by stopping the second handoff holding timer.
  - 21. A method comprising:determining a channel resource occupancy for a single call; and

determining a channel resource occupancy for a soft added call.

- 22. The method of claim 21, wherein the single call relates to a call of a mobile terminal with respect to one base station.
- 23. The method of claim 21, wherein the soft added call relates to a call of a mobile terminal with respect to more than one base station.
- 24. The method of claim 21, wherein the channel resource occupancy for the single call comprises a holding time.

- 25. The method of claim 24, wherein determining the channel resource occupancy for the single call comprises calculating the holding time by counting a period when an originated/terminated call is set up.
- 26. The method of claim 24, wherein calculating the holding time includes counting the holding time from a point of time when a channel resource is occupied due to a call origination/termination to a base station to a point of time when the channel resource is withdrawn.
- 27. The method of claim 24, wherein calculating the holding time includes counting the holding time from a point of time when a channel resource is occupied due to receipt of a call origination/termination request message to a point of time when a soft add notification message is received from an other base station after call setup in response to the call origination/termination request, and counting the holding time from a point of time when the soft drop notification message is received from the another base station to a point of time when the channel resource is withdrawn due to completion of the soft added call.
- 28. The method of claim 21, wherein the channel resource occupancy for the soft added cell comprises a handoff holding time.

- 29. The method of claim 28, wherein determining the channel resource occupancy for the soft added call comprises calculating a handoff holding time by counting a period when soft added calls are set up.
- 30. The method of claim 29, wherein calculating the handoff holding time includes counting the handoff holding time from a point of time when a source base station receives a soft add notification message from another base stations to a point of time when the channel resource is withdrawn.
- 31. The method of claim 29, wherein calculating the handoff holding time includes counting the handoff holding time from a point of time when the channel resource is occupied due to a target base station's receipt of a handoff request from a mobile terminal to a point of time when the target base station receives a soft drop notification messages from another base station.
- 32. The method of claim 29, wherein calculating the handoff holding time includes counting the handoff holding time from a point of time when the channel resource is occupied due to neighbor base station's receipt of a handoff request from a mobile terminal to a point of time when the neighbor base station transmits a soft drop notification message and the channel resource is withdrawn.